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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,321	12/03/2003	Oliver Keren Ban	AUS920030787US1	6222
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IBM CORPORATION PO BOX 12195 DEPT YXSA, BLDG 002 RESEARCH TRIANGLE PARK, NC 27709			EXAMINER SIKRI, ANISH	
			ART UNIT 2443	PAPER NUMBER
			MAIL DATE 01/07/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/727,321

Applicant(s)

BAN, OLIVER KEREN

Examiner

ANISH SIKRI

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-15 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 03 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/5508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

In view of the appeal brief filed on 9/2/2008, PROSECUTION IS HEREBY REOPENED. As set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Nathan J. Flynn/

Supervisory Patent Examiner, Art Unit 2454.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Independent claims 1, 6 and 11 recite that routing broadcasting packets from a sending server comprising: means for temporarily storing a broadcasting payload inside a broadcasting router as a coded header by temporarily coding the broadcasting payload to a set of symbols; means for temporarily coding the broadcasting payload to a set of symbols; means for temporarily stripping the broadcasting payload from the broadcasting packet; means for temporarily replacing the stripped broadcasting payload with set of coded symbols in the

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broadcasting packet; means for adding the coded symbols to a header of the broadcasting packet; means for transmitting the coded header of the broadcasting packet to the receiving server via the broadcasting router; means for transmitting the broadcasting payload to its coded header in the receiving server via the broadcasting router; and means for converting the coded set of symbols of the broadcasting payload from its coded format to form a full broadcasting packet in the receiving server.

The specification does not clearly enable one skilled in the art to which it pertains, or with which it is mostly nearly connected, to make and/or use of temporarily coding broadcasting payload to set of symbols. The specification just state that packets may be created by the sender, on page 7 of the specification the main key points of the invention are stated in the following lines "A key to the present invention is the separate temporary storage of the coded header of the broadcasting payload in the broadcasting routers 23, 37, and 47, which is then transmitted to the receiving server via the broadcasting routers 23, 37 and 47. The corresponding document of the broadcasting payload is transmitted to form a full broadcasting packet in the receiving server. This is illustrated in Fig. 2 wherein the routers 23, 27 and 47 are shown. In Fig 2, there is illustrated a packet document or broadcasting packet being transmitted by a sender, e.g. packet on sending terminal 13 as shown in Fig 2. The broadcasting packet is sent to a broadcasting router 23, 37, and 47 via a broadcasting server 31 that temporarily stores the broadcasting payload 32 of the broadcasting packet in a coded header 38. This occurs by temporarily coding the broadcasting payload 32

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to a set of symbols, temporarily stripping the broadcasting payload 32 from the broadcasting packet, and temporarily replacing the broadcasting packet with a coded symbol and adding the coded symbol to the header 38. The sending terminal 13 is able to transmit these coded headers 38 to the receiving terminal 11, where the broadcasting payload 32 is retrieved from storage and coded header 38 is patched to the corresponding broadcasting payload 32. The broadcasting payload 32 is relayed to a destination router according to its address".

The specification does not clearly enable one skilled in the art to which it pertains, or with which it is most nearly connected to make and/or use of temporarily coding broadcasting payload to set of symbols. The use of symbols is not properly or sufficiently defined in the specification. The use of symbols is just stated for example in one line "This occurs by temporarily coding the broadcasting payload 32 to a set of symbols, temporarily stripping the broadcasting payload 32 from the broadcasting packet, and temporarily replacing the broadcasting packet with a coded symbol and adding the coded symbol to the header 38." What really is the coded symbol consisting of? A coded symbol can be any type of data.

The specification does not clearly disclose on a how a packet can be sent without a payload and vice-versa without a header. For example the following lines on page 8, line 24 of the specification states "If Yes, then the broadcasting payload of the broadcasting packet is temporarily stored in a broadcasting router

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as a coded header, step 82. The coded header is then transmitted to the receiving server, step 83. The broadcasting payload is transmitted separately to its coded header, step 84. A full broadcasting packet is then formed in the receiving server when the broadcasting payload is relayed to its corresponding coded header to its address, step 85". The specification does not disclose to a person skilled in the art in detail on how on how a packet payload is transmitted without a header, as a payload contains data.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

Evidence that the independent claims **1, 6 and 11** fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in the reply filed 7/2/07. In that paper, applicant has stated "means for temporarily replacing the stripped broadcasting payload with a set of coded symbols in the broadcasting packet;

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means for adding the coded symbols to a header of the broadcasting packet;
means for transmitting the coded header and of the broadcasting packet to the
receiving server via the broadcasting router; means for transmitting the
broadcasting payload to its coded header in the receiving server via the
broadcasting router", and this statement indicates that the invention is different from what is defined in the claim(s) because the applicant states on the use of symbols. But the applicant does not disclose what the exactly a symbols is? What constitutes a symbol? The applicant argues on remarks filed on 7/2/07 stating that on page 11 "Applicants agree that any data could be interpreted as a symbol, and that the application has limited the use of the word "symbol" to include data that is substantially smaller than the contents of the broadcasting payload to which the set of symbols would be coded to represent. Coding with symbols is current in the art, and one skilled in the art would be enabled to use the current art coding with symbols in this manner described by applicants to perform the techniques in the application". The specifications never state or specify what size the symbols are? and the use of the symbols by itself can be treated as any data of any size.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims **1-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Krause (US Pub 20050180568), view of Karim (US Pub 20030217108), And further in view of Lacy et al (US Pub 20040205485).

Consider **Claim 1**, Krause discloses a communication network where a user access via a plurality of data processor controlled interactive display terminals for sending and receiving broadcasting packets (Krause, Pg 7 [0076]), means for temporarily storing broadcasting payload (Krause, Pg 7 [0077], Pg 10 [0094], Pg 11 [0102]), means for temporarily stripping the broadcasting payload from the broadcasting packet (Krause, Pg 7 [0077], Pg 10 [0094], Pg 11 [0102]); means for transmitting the coded header of the broadcasting packet to the receiving server via the broadcasting router (Krause, Pg 7 [0077], Pg 10 [0094], Pg 11 [0102]); means for transmitting the broadcasting payload to its coded header in the receiving server via the broadcasting router (Krause, Pg 7 [0077], Pg 10 [0094], Pg 11 [0102]); Krause discloses means for temporarily replacing the stripped broadcasting payload (Krause, Pg 7 [0077], Pg 10 [0094], Pg 11 [0102]).

But Krause fails to disclose that an electronic document distribution system for routing broadcasting packets from a sending server to a receiving server.

Nonetheless, Karim discloses an electronic document distribution system for routing broadcasting packets from a sending server to a receiving server comprising (Karim, Pg 3, [0051], [0057]).

Both Karim-Krause provide features related to communication. Therefore one of ordinary skill in the art would have been motivated to combine the teachings since both are within the same environment.

Therefore, it would have been obvious of ordinary skill in the art at the time of the invention was made to incorporate the use of an electronic document distribution system, taught by Karim, in the system of Krause for the purpose of having the system to able to generate and distribute data throughout the network/destination in a very efficient manner to reduce network congestion.

But Krause fails to disclose inside a broadcasting router as a coded header by temporarily coding the broadcasting payload to a set of symbols and means for adding the coded symbols to a header of the broadcasting packet and means for converting the coded set of symbols of the broadcasting payload from its coded format to form a full broadcasting packet in the receiving server and fails to disclose with a set of coded symbols in the broadcasting packet.

Nonetheless Lacy et al discloses a broadcasting router as a coded header by temporarily coding the broadcasting payload to a set of symbols (Lacy et al, Pg 1, [0008], [0011], Pg 2, [0021]) and means for adding the coded symbols to a header of the broadcasting packet (Lacy et al, Pg 1, [0008], [0011], Pg 2, [0021]) and means for converting the coded set of symbols of the broadcasting payload

from its coded format to form a full broadcasting packet in the receiving server (Lacy et al, Pg 1, [0008], [0011], Pg 2, [0021]). Lacy et al discloses coded symbols in the broadcasting packet (Lacy et al, Pg 1, [0008], [0011], Pg 2, [0021]).

Both Krause-Lacy provide features related to communication. Therefore one of ordinary skill in the art would have been motivated to combine the teachings since both are within the same environment.

Therefore, it would have been obvious of ordinary skill in the art at the time of the invention was made to incorporate the coding of payload with coded symbol, taught by Lacy et al, in the system of Krause for the purpose of generating and distributing packets throughout the network/destination in a very efficient manner to reduce network congestion.

Consider **Claim 2**, Krause-Karim-Lacy discloses the system of claim 1 further comprising means in the document distribution system m (Karim, Pg 3, [0051], [0057]) for reducing the broadcasting payload of the broadcasting packet to a coded header of the broadcasting packet (Lacy et al, Pg 1, [0008], [0011], Pg 2, [0021]).

Consider **Claim 3**, Krause-Karim-Lacy et al discloses the system of claim 2 further comprising means for relaying the broadcasting payload to a destination router according to its address to form the full broadcasting packet (Krause, Pg 7

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[0077], Pg 10 [0094], Pg 11 [0102]). Lacy et al discloses the means receiving the coded header of the broadcasting packet and patching the broadcasting payload that corresponds to the set of coded symbols in the coded header from storage (Lacy et al, Pg 1, [0008], [0011], Pg 2, [0021]).

Consider **Claim 4**, Krause-Karim-Lacy et al discloses the system of claim 3 wherein said document distribution system is an electronic mail distribution system associated with electronic mail sources (Karim, Pg 3, [0051], [0057]).

Consider **Claim 5**, Krause-Karim-Lacy et al discloses the communication network is a distributed network; said broadcasting payloads are digitized packets; and said network distribution system is a network server system (Lacy et al, Pg 1, [0007], [0008], [0011], [0012]).

Claims **6-10**, have similar limitations as to claims **1-5** respectively; therefore they are rejected under the same rational as to claims **1-5** respectively.

Claims **11-15**, have similar limitations as to claims **1-5** respectively; therefore they are rejected under the same rational as to claims **1-5** respectively.

Response to Arguments

The 112 rejections are applied again due the use of symbols in claims 1, 6 and 11. The 'symbol' element interpretation far extends beyond the scope of the specification and that of the claimed invention, in light of such broad interpretation, renders the claims unclear as to their true scope and also does not enable the claimed invention to operate in the manner desired by the Applicant without undue experimentation by one skilled in the art.

The specifications never state or specify what size the symbols are? And the use of the symbols by itself can be treated as any data of any size. The use of the term "symbol" is quite generic in relation to this application/invention.

The application does not fully explain on payload is replaced with coded symbols and how the header of the packet is also replaced with a coded symbols. Some of the questions which can arise is that are the symbols the same which are being used in the payload and the header?

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANISH SIKRI whose telephone number is 571-270-1783. The examiner can normally be reached on 8am - 5pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger can be reached on 571-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anish Sikri

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a.s.

December, 24 2008

/Nathan J. Flynn/

Supervisory Patent Examiner, Art Unit 2454